Title (en)
LOAD STRAPPING MEANS FOR PALLETS

Title (de)
LASTENBEFESTIGUNGSVORRICHTUNG FÜR PALETTEN

Title (fr)
MOYENS DE SANGLAGE DE CHARGES POUR DES PALETTES

Publication
EP 1289850 A1 20030312 (EN)

Application
EP 01914057 A 20010327

Priority
- GB 0101318 W 20010327
- GB 0014655 A 20000616
- GB 0014657 A 20000616
- GB 0014658 A 20000616

Abstract (en)
[origin: US2004101380A1] Load strapping means for use with 4-way pallet comprises a cap (11) for placing on a load (17) on a 4-way pallet (16), at least two strapping strands (15) retractable through openings (26) into housings (14) at opposite sides (at least) of the cap, spring means within the housings for retracting the strapping strands, hooks (18)on the free ends of the strapping strands for engagement with the underside (21) of the platform (22) of a 4-way pallet, tensioning means within the housings for tightening the strapping strands between the cap and the pallet after interposing a load between the cap and the pallet, and stop means (34) for limiting retraction of the hooks into the housings when not engaged with a pallet Such a cap (11) can be used without need to modify existing 4-way pallets, particularly-hut not exclusively-those made of wood. Each hook (18) preferably has two prongs (19) spaced apart so as to fit one to each side of a middle spacer (20) of a 4-way pallet, without being in danger of damage or dislodgement by the forks of a fork-lift truck.

IPC 1-7
B65D 71/02; B60P 7/08; B65D 19/44

IPC 8 full level
B65D 19/44 (2006.01); **B60P 7/08** (2006.01); **B65D 19/38** (2006.01); **B65D 71/02** (2006.01); **F16B 2/08** (2006.01)

CPC (source: EP KR US)
B60P 7/0838 (2013.01 - US); **B65D 19/00** (2013.01 - KR); **B65D 71/0096** (2013.01 - EP); B60P 7/0838 (2013.01 - EP);
B65D 2571/00055 (2013.01 - EP); B65D 2571/00111 (2013.01 - EP)

Cited by
CN110436015A; GB2590543B; WO2021090253A1; EP4054895B1

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)
US 2004101380 A1 20040527; **US 6821068 B2 20041123**; AT E264232 T1 20040415; AU 2001239443 B2 20040610; AU 3944301 A 20011224; BR 0111565 A 20030909; BR 0111565 B1 20120417; CA 2412019 A1 20011220; CA 2412019 C 20081014; CN 1232428 C 20051221; CN 1436141 A 20030813; DE 60102816 D1 20040519; DE 60102816 T2 20050113; DK 1289850 T3 20040712; EP 1289850 A1 20030312; EP 1289850 B1 20040414; ES 2219515 T3 20041201; GB 0104482 D0 20010411; GB 2363599 A 20020102; GB 2363599 B 20020529; HK 1054533 A1 20031205; HK 1054533 B 20060413; HU P0300950 A2 20030828; IL 153466 A0 20030706; IL 153466 A 20061210; JP 2004503442 A 20040205; JP 4913311 B2 20120411; KR 20030014266 A 20030215; MX PA02012247 A 20040906; NO 20025996 D0 20021213; NO 20025996 L 20030214; NO 326861 B1 20090302; NZ 523146 A 20031031; PL 359723 A1 20040906; PT 1289850 E 20040630; TR 200401076 T4 20040621; WO 0196203 A1 20011220

DOCDB simple family (application)
US 31142403 A 20030721; AT 01914057 T 20010327; AU 2001239443 A 20010327; AU 3944301 A 20010327; BR 0111565 A 20010327; CA 2412019 A 20010327; CN 01811285 A 20010327; DE 60102816 T 20010327; DK 01914057 T 20010327; EP 01914057 A 20010327; ES 01914057 T 20010327; GB 0101318 W 20010327; GB 0104482 A 20010223; HK 03106775 A 20030922; HU P0300950 A 20010327; IL 15346601 A 20010327; IL 15346602 A 20021216; JP 2002510354 A 20010327; KR 20027017042 A 20021213; MX PA02012247 A 20010327; NO 20025996 A 20021213; NZ 52314601 A 20010327; PL 35972301 A 20010327; PT 01914057 T 20010327; TR 200401076 T 20010327